



SEQUENCE LISTING<110> Istituto Superiore di Sanità ENSOLI, Barbara <120> HIV-1 Tat, or derivatives thereof, alone or in combination, for prophylactic and therapeutic vaccination against AIDS, tumors and related syndromes <130> 1354PTWO<150> RM97A000743<151> 1997-12-01<160> 37 <170> PatentIn version 3.1<210> 1<211> 261<212> DNA<213> AIDS-associated retrovirus<220><221> CDS<222> (1)..(261)<223>

<400> 1
atg gag cca gta gat cct aga cta gag ccc tgg aag cat cca gga agt
48
Met Glu Pro Val Asp Pro Arg Leu Glu Pro Trp Lys His Pro Gly Ser
1 5 10 15

cag cct aaa act gct tgt acc aat tgc tat tgt aaa aag tgt tgc ttt
96
Gln Pro Lys Thr Ala Cys Thr Asn Cys Tyr Cys Lys Lys Cys Cys Phe
20 25 30

cat tgc caa gtt tgt ttc ata aca aaa gcc tta ggc atc tcc tat ggc
144
His Cys Gln Val Cys Phe Ile Thr Lys Ala Leu Gly Ile Ser Tyr Gly
35 40 45

agg aag aag cgg aga cag cga cga aga cct cct caa ggc agt cag act
192
Arg Lys Lys Arg Arg Gln Arg Arg Arg Pro Pro Gln Gly Ser Gln Thr
50 55 60

cat caa gtt tct cta tca aag cag ccc acc tcc caa tcc cga ggg gac
240
His Gln Val Ser Leu Ser Lys Gln Pro Thr Ser Gln Ser Arg Gly Asp
65 70 75 80

ccg aca ggc ccg aag gaa tag
261
Pro Thr Gly Pro Lys Glu
85

<210> 2<211> 86<212> PRT<213> Aids-associated retrovirus<40
0> 2

Met Glu Pro Val Asp Pro Arg Leu Glu Pro Trp Lys His Pro Gly Ser
1 5 10 15

Gln Pro Lys Thr Ala Cys Thr Asn Cys Tyr Cys Lys Lys Cys Cys Phe
20 25 30

His Cys Gln Val Cys Phe Ile Thr Lys Ala Leu Gly Ile Ser Tyr Gly
35 40 45

Arg Lys Lys Arg Arg Gln Arg Arg Arg Pro Pro Gln Gly Ser Gln Thr
50 55 60

His Gln Val Ser Leu Ser Lys Gln Pro Thr Ser Gln Ser Arg Gly Asp
65 70 75 80

Pro Thr Gly Pro Lys Glu
85

<210> 3<211> 86<212> DNA<213> Aids-associated retrovirus<40
0> 3

atggagccag tagatcctag actagagccc tggaagcatc caggaagtca gcctaaaa
ct 60

gcggtaccaa ttgctattgt aaaaagtgtt gctttcattg ccaagtttgt ttcataac
aa 120

aagccttagg catctcctat ggcaggaaga agcggagaca gcgacgaaga cctcctca
ag 180

gcagtcagac tcatcaagtt tctctatcaa agcagcccac ctcccaatcc cgagggga
cc 240

cgacaggccc gaaggaatag
260

<210> 4<211> 261<212> DNA<213> Aids-associated retrovirus<4
00> 4

atggagccag tagatcctag actagagccc tggaagcatc caggaagtca gcctaaaa
ct 60

gcttgtacca attgctattg taaaaagtgt tgctttcatt gccaaagtttg tttcataa
ca 120

aacgccttag gcatctccta tggcaggaag aagcggagac agcgacgaag acctcctc
aa 180

ggcagtcaga ctcataaagt ttctctatca aagcagccca cctcccaatc ccgagggg
ac 240

ccgacaggcc cgaaggaata g
261

<210> 5<211> 252<212> DNA<213> Aids-associated retrovirus<4
00> 5

atggagccag tagatcctag actagagccc tggaagcatc caggaagtca gcctaaaa
ct 60

gcttgtacca attgctattg taaaaagtgt tgctttcatt gccaaagtttg tttcataa
ca 120

aaagccttag gcatctccta tggcaggaag aagcggagac agcgacgaag acctcctc
aa 180

ggcagtcaga ctcataaagt ttctctatca aagcagccca cctcccaatc cccgacag
gc 240

ccgaaggaat ag
252

<210> 6<211> 252<212> DNA<213> Aids-associated retrovirus<4
00> 6

atggagccag tagatcctag actagagccc tggaagcatc caggaagtca gcctaaaa
ct 60

gcttgtacca attgctattg taaaaagtgt tgctttcatt gccaaagtttg tttcataa
ca 120

aacgccttag gcatctccta tggcaggaag aagcggagac agcgacgaag acctcctc
aa 180

ggcagtcaga ctcataaagt ttctctatca aagcagccca cctcccaatc cccgacag

gc 240

ccgaaggaat ag
252<210> 7<211> 86<212> PRT<213> Aids-associated retrovirus<40
0> 7Met Glu Pro Val Asp Pro Arg Leu Glu Pro Trp Lys His Pro Gly Ser
1 5 10 15Gln Pro Lys Thr Ala Gly Thr Asn Cys Tyr Cys Lys Lys Cys Cys Phe
20 25 30His Cys Gln Val Cys Phe Ile Thr Lys Ala Leu Gly Ile Ser Tyr Gly
35 40 45Arg Lys Lys Arg Arg Gln Arg Arg Arg Pro Pro Gln Gly Ser Gln Thr
50 55 60His Gln Val Ser Leu Ser Lys Gln Pro Thr Ser Gln Ser Arg Gly Asp
65 70 75 80Pro Thr Gly Pro Lys Glu
85<210> 8<211> 86<212> PRT<213> Aids-associated retrovirus<40
0> 8Met Glu Pro Val Asp Pro Arg Leu Glu Pro Trp Lys His Pro Gly Ser
1 5 10 15

Gln Pro Lys Thr Ala Cys Thr Asn Cys Tyr Cys Lys Lys Cys Cys Phe
 20 25 30

His Cys Gln Val Cys Phe Ile Thr Thr Ala Leu Gly Ile Ser Tyr Gly
 35 40 45

Arg Lys Lys Arg Arg Gln Arg Arg Arg Pro Pro Gln Gly Ser Gln Thr
 50 55 60

His Gln Val Ser Leu Ser Lys Gln Pro Thr Ser Gln Ser Arg Gly Asp
 65 70 75 80

Pro Thr Gly Pro Lys Glu
 85

<210> 9<211> 83<212> PRT<213> Aids-associated retrovirus<40
 0> 9

Met Glu Pro Val Asp Pro Arg Leu Glu Pro Trp Lys His Pro Gly Ser
 1 5 10 15

Gln Pro Lys Thr Ala Cys Thr Asn Cys Tyr Cys Lys Lys Cys Cys Phe
 20 25 30

His Cys Gln Val Cys Phe Ile Thr Lys Ala Leu Gly Ile Ser Tyr Gly
 35 40 45

Arg Lys Lys Arg Arg Gln Arg Arg Arg Pro Pro Gln Gly Ser Gln Thr
 50 55 60

His Gln Val Ser Leu Ser Lys Gln Pro Thr Ser Gln Ser Pro Thr Gly
 65 70 75 80

Pro Lys Glu

<210> 10<211> 83<212> PRT<213> Aids-associated retrovirus<4
 00> 10

Met Glu Pro Val Asp Pro Arg Leu Glu Pro Trp Lys His Pro Gly Ser
 1 5 10 15

Gln Pro Lys Thr Ala Cys Thr Asn Cys Tyr Cys Lys Lys Cys Cys Phe
 20 25 30

His Cys Gln Val Cys Phe Ile Thr Thr Ala Leu Gly Ile Ser Tyr Gly
 35 40 45

Arg Lys Lys Arg Arg Gln Arg Arg Arg Pro Pro Gln Gly Ser Gln Thr
 50 55 60

His Gln Val Ser Leu Ser Lys Gln Pro Thr Ser Gln Ser Pro Thr Gly
 65 70 75 80

Pro Lys Glu

<210> 11<211> 20<212> PRT<213> Aids-associated retrovirus<4
 00> 11

Met Glu Pro Val Asp Pro Arg Leu Glu Pro Trp Lys His Pro Gly Ser
 1 5 10 15

Gln Pro Lys Thr
 20

<210> 12<211> 20<212> PRT<213> Aids-associated retrovirus<4
 00> 12

Ala Cys Thr Asn Cys Tyr Cys Lys Lys Cys Cys Phe His Cys Gln Val
 1 5 10 15

Cys Phe Ile Thr
 20

<210> 13<211> 16<212> PRT<213> Aids-associated retrovirus<4
 00> 13

Gln Val Cys Phe Ile Thr Lys Ala Leu Gly Ile Ser Tyr Gly Arg Lys
 1 5 10 15

<210> 14<211> 15<212> PRT<213> Aids-associated retrovirus<4
 00> 14

Ser Tyr Gly Arg Lys Lys Arg Arg Gln Arg Arg Arg Pro Pro Gln
 1 5 10 15

<210> 15<211> 16<212> PRT<213> Aids-associated retrovirus<4
 00> 15

Arg Pro Pro Gln Gly Ser Gln Thr His Gln Val Ser Leu Ser Lys Gln
 1 5 10 15

<210> 16<211> 16<212> PRT<213> Aids-associated retrovirus<4
 00> 16

His Gln Val Ser Leu Ser Lys Gln Pro Thr Ser Gln Ser Arg Gly Asp

1 5 10 15

<210> 17<211> 14<212> PRT<213> Aids-associated retrovirus<4
00> 17

Pro Thr Ser Gln Ser Arg Gly Asp Pro Thr Gly Pro Lys Glu
1 5 10

<210> 18<211> 15<212> DNA<213> Aids-associated retrovirus<4
00> 18
atggcaggaa gaagc
15

<210> 19<211> 15<212> DNA<213> Aids-associated retrovirus<4
00> 19
ctattcttta gttcc
15

<210> 20<211> 15<212> DNA<213> Aids-associated retrovirus<4
00> 20
atgggtggca agtgg
15

<210> 21<211> 15<212> DNA<213> Aids-associated retrovirus<4
00> 21
tcagcagtc ttgta
15

<210> 22<211> 15<212> DNA<213> Aids-associated retrovirus<4
00> 22
atgggtggca gaggc
15

<210> 23<211> 15<212> DNA<213> Aids-associated retrovirus<4
00> 23
ttattgtgac gaggg
15

<210> 24<211> 15<212> DNA<213> Aids-associated retrovirus<4
00> 24
atgtggcccc ctggg

15

<210> 25<211> 15<212> DNA<213> Aids-associated retrovirus<4
00> 25
ttaggaagca ttcag
15

<210> 26<211> 15<212> DNA<213> Aids-associated retrovirus<4
00> 26
atgagaattt cgaaa
15

<210> 27<211> 15<212> DNA<213> Aids-associated retrovirus<4
00> 27
tcaagaagtg ttgat
15

<210> 28<211> 15<212> DNA<213> Aids-associated retrovirus<4
00> 28
atggagccag tagat
15

<210> 29<211> 15<212> DNA<213> Aids-associated retrovirus<4
00> 29
ctattccttc gggcc
15

<210> 30<211> 27<212> DNA<213> Aids-associated retrovirus<4
00> 30
ggcccgaagg aaatggcagg aagaagc
27

<210> 31<211> 27<212> DNA<213> Aids-associated retrovirus<4
00> 31
ggcccgaagg aaatgggtgg caagtgg
27

<210> 32<211> 27<212> DNA<213> Aids-associated retrovirus<4
00> 32
ggcccgaagg aaatgggtgc gagagcg
27

<210> 33<211> 27<212> DNA<213> Aids-associated retrovirus<4

00> 33
ggcccgaagg aaatgtggcc ccctggg
27

<210> 34<211> 27<212> DNA<213> Aids-associated retrovirus<4
00> 34
ggcccgaagg aaatgagaat ttcgaaa
27

<210> 35<211> 24<212> DNA<213> Aids-associated retrovirus<4
00> 35
ttaggctacg acccggcgga aaga
24

<210> 36<211> 24<212> DNA<213> Aids-associated retrovirus<4
00> 36
atagggggtg cagccttctg acag
24